



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,419	02/02/2007	Jay-Yeob Hwang	HWAN3049/REF	2797

23364 7590 01/14/2011  
BACON & THOMAS, PLLC  
625 SLATERS LANE  
FOURTH FLOOR  
ALEXANDRIA, VA 22314-1176

EXAMINER
----------

TOLENTINO, RODERICK

ART UNIT	PAPER NUMBER
----------	--------------

2439

MAIL DATE	DELIVERY MODE
-----------	---------------

01/14/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,419	<b>Applicant(s)</b> HWANG ET AL.	
	<b>Examiner</b> Roderick Tolentino	<b>Art Unit</b> 2439	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 21 – 54 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed 11/08/2010 have been fully considered but they are not persuasive.

3. Applicant argues that Mizoguchi fails to disclose, teach or even suggest “generating at the server an image table in which two or more key images and other images that are previously designated on a user basis are randomly mixed and transmitting the image table to a screen of the user's terminal; and if the key images are validly selected and inputted from the terminal, approving authentication of the user at the server, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the terminal,” regarding claim 21. Examiner respectfully disagrees. Mizoguchi discloses generating at the server an image table in which two or more key images and other images that are previously designated on a user basis are randomly mixed and transmitting the image table to a screen of the user's terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment) and if the key images are validly selected and inputted from the terminal, approving authentication of the user at the server, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment). Applicant argues that the moving of a cursor to select is visually

Art Unit: 2439

displaying selecting procedure. However, despite allowing the cursor to pick the image Mizoguchi further teaches the shuffling of images for the exact reason of preventing an onlooker from seeing the password and/or image selection process, this is supported on Paragraph 0038 of Mizoguchi. Thus Mizoguchi teaches the claim limitations as written.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 21, 22, 26 – 37, 39, 40, 43 – 50, 53 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizoguchi et al. U.S. PG-Publication No. (2004/0030934).

6. As per claim 21, Mizoguchi discloses generating at the server an image table in which two or more key images and other images that are previously designated on a user basis are randomly mixed and transmitting the image table to a screen of the user's terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access

Art Unit: 2439

to a secure environment) and if the key images are validly selected and inputted from the terminal, approving authentication of the user at the server, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

7. As per claim 22, Mizoguchi discloses generating and outputting at the lock device an image table in which two or more key images and other images that are previously designated are randomly mixed (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment) and if the key images are validly selected and inputted from an input unit, approving authentication of the user and releasing the locking state at the lock device, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the lock device (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

8. As per claims 26 and 43, Mizoguchi discloses the image table provided by the attempt of authentication of the user is different from an image table provided by the previous attempt of authentication (Mizoguchi, Paragraph 0038, different types of images).

9. As per claim 27, Mizoguchi discloses the image table provided by the attempt of authentication of the user is different from an image table provided by the previous attempt of authentication (Mizoguchi, Paragraph 0038, different types of images).

10. As per claims 28 and 44, Mizoguchi discloses start coordinates (initially inputted key image coordinates) at said step (b) are previously designated as one of the key

Art Unit: 2439

images (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

11. As per claims 29 and 45, Mizoguchi discloses start coordinates (initially inputted key image coordinates) at said step (b) are previously designated as one of the key images (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

12. As per claims 30 and 46, Mizoguchi discloses the authentication approval at said step (b) is made in such a way that the corresponding key images are sequentially inputted by movement of coordinates in the image table based on a predetermined input sequence of the key images (Mizoguchi, Paragraph 0038, different types of images).

13. As per claims 31 and 47, Mizoguchi discloses the authentication approval at said step (b) is made in such a way that the corresponding key images are sequentially inputted by movement of coordinates in the image table based on a predetermined input sequence of the key images (Mizoguchi, Paragraph 0038, different types of images).

14. As per claims 32 and 48, Mizoguchi discloses start coordinates (initially inputted key image coordinates) at said step (b) are designated as coordinates of a first key image of the key images (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

15. As per claim 33, Mizoguchi discloses start coordinates (initially inputted key image coordinates) at said step (b) are designated as coordinates of a first key image of the key images (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

Art Unit: 2439

16. As per claims 34 and 49, Mizoguchi discloses before said step (a), the server constructs and registers a personalization image table which is formed by selecting the key image and other images constituting the image table individually on a user basis (Mizoguchi, Paragraph 0013 and 0023, images used as a password to gain access to a secure environment and works with a server).

17. As per claims 35 and 50, Mizoguchi discloses before said step (a), the lock device constructs and registers a personalization image table which is formed by selecting the key image and other images constituting the image table individually on a user basis (Mizoguchi, Paragraph 0013 and 0023, images used as a password to gain access to a secure environment and works with a server).

18. As per claim 36, Mizoguchi discloses when the user selects the key images, and a passage coordinate image or a terminal coordinate image, the server constructs the personalization image table by randomly extracting from remaining images excepting the selected images (Mizoguchi, Paragraph 0038, different types of images).

19. As per claim 37, Mizoguchi discloses, when the user selects the key images, and a passage coordinate image or a terminal coordinate image, the lock device constructs the personalization image table by randomly extracting from remaining images excepting the selected images (Mizoguchi, Paragraph 0038, different types of images).

20. As per claim 39, Mizoguchi discloses generating at the server an image table in which two or more key images and other images that are previously designated on a user basis are randomly mixed and transmitting the image table to a screen of the

user's terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment) and if the key images are validly selected and inputted from the terminal, approving authentication of the user at the server, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the terminal (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

21. As per claim 40, Mizoguchi discloses generating and outputting at the lock device an image table in which two or more key images and other images that are previously designated are randomly mixed (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment) and if the key images are validly selected and inputted from an input unit, approving authentication of the user and releasing the locking state at the lock device, wherein the procedure of selecting the key images is not displayed on the image table in the screen of the lock device (Mizoguchi, Paragraph 0013, images used as a password to gain access to a secure environment).

22. As per claims 53 and 54, Mizoguchi discloses if the images are moved, a pointer is moved and if the images are not moved, a pointer is not moved (Mizoguchi, Paragraph 0038, mouse clicking).

### ***Claim Rejections - 35 USC § 103***

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the



Art Unit: 2439

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 23 – 25, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizoguchi et al. U.S. PG-Publication No. (2004/0030934) in view of Lee et al. U.S. PG-Publication No. (2004/0185869).

25. As per claims 23 and 41, Mizoguchi fails to teach before said step (a), an access location tracking step (c) in which a program that performs a function of tracking an access location of the terminal on-line is automatically installed and executed in the terminal from the server connected to the terminal, and access location information of the terminal is sent and stored in the server. However, in an analogous art Lee before said step (a), an access location tracking step (c) in which a program that performs a function of tracking an access location of the terminal on-line is automatically installed and executed in the terminal from the server connected to the terminal, and access location information of the terminal is sent and stored in the server (Lee, Paragraph 0024, locating mobile terminals obtaining access).

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use Lee's Method for tracking location of subscribers in mobile communication network with Mizoguchi's user selectable authentication interface and universal password because it offers the advantage of continuously tracking the location of a subscriber in a network (Lee, Paragraph 0007).

26. As per claims 24 and 42, Mizoguchi as modified teaches the step (d) of reporting access location information on online of another person acquired through the step (c) to the user when another person proceeds with the step (b) by using the authentication

Art Unit: 2439

information of the user in a state that the authentication of the user is approved at the server and being connected (Lee, Paragraph 0031, authenticates terminal).

27. As per claim 25, Mizoguchi as modified teaches after the step (b), the step (e) of reporting the latest access location information to the user's terminal (Lee, Paragraph 0024, locating mobile terminals obtaining access).

28. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizoguchi et al. U.S. PG-Publication No. (2004/0030934) in view of Browne U.S. PG-Publication No. (20040153665).

29. As per claim 38, Mizoguchi fails to teach the server acquires IP information of a terminal accessed prior to said step (b), and notifies, if the key images of the user are not validly inputted from said step (b), an alarm message including the IP information to the user. However, in an analogous art Browne teaches the server acquires IP information of a terminal accessed prior to said step (b), and notifies, if the key images of the user are not validly inputted from said step (b), an alarm message including the IP information to the user (Browne, 0031, alert message contains IP address of attacking computer).

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use Browne's wireless network control and protection system with Mizoguchi's user selectable authentication interface and universal password because it offers the advantage of providing more than a single level of security to make the network more secure (Browne, Paragraph 0006).

30. Mizoguchi et al. U.S. PG-Publication No. (2004/0030934) in view of Park U.S. Patent No. (7,240,367).

31. As per claims 51 and 52, Mizoguchi fails to disclose the procedure of selecting the key images involves shifting of all of the images in the image table in the direction of a direction key. However, in an analogous art Park teaches wherein the procedure of selecting the key images involves shifting of all of the images in the image table in the direction of a direction key (Park, Col. 5 Lines 49 – 64, user shifts array when inputting password).

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use Park's user interface for inputting password and password system using the same with Mizoguchi's user selectable authentication interface and universal password because it offers the advantage of preventing a password from being revealed (Park, Col. 2 Lines 10 – 14).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on Monday - Friday 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2439

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roderick Tolentino  
Examiner  
Art Unit 2439

/R. T./  
Examiner, Art Unit 2439

/Michael J Simitoski/  
Primary Examiner, Art Unit 2439